

**Title:** Big Island Axis Deer Project

**Organization:** Big Island Invasive Species Committee

**Award:** \$90,000



**Introduction:** Axis deer present a huge threat to agriculture, watershed health, and human safety on the Big Island. Current estimates for axis deer are as low as 30 animals, indicating that there is a narrow window of opportunity to prevent the economic and ecological damage already suffered by neighboring islands where deer populations may no longer be eradicated. The goal of this project is to support the second of a projected seven-year campaign to eradicate axis deer from the island.

BIISC's HISC award leveraged funding from the Department of Forestry and Wildlife Special Funds and US Fish and Wildlife Service totaling an additional \$107,772. Total expenses for FY 12 were \$197,772. Our single guiding goal is 100% eradication of the invasive deer positively identified.

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### ***Achievements in FY12***

**Confirmed Presence Of Axis Deer:** The Invasive Deer (ID) Team was able to confirm the presence of deer on April 11<sup>th</sup> 2012.

**Dispatch Invasive Deer-** To date 100% of deer detected have been removed (3).

**Train Interagency Task Force:** The Invasive Deer Team was able to plan and execute a comprehensive four-day axis deer training on the island of Molokai. The focus of the training was axis deer dispatch and land certification as well as bovine tuberculosis training. 26 individuals attended from 5 different partner agencies, feedback was excellent.

**Draft Strategic Plan:** We completed a draft Big Island Deer Working Group Strategic Plan. The plan focuses on ideal control mechanisms, strategies and partner cooperation. The draft is currently under peer review.

**Population Assessment:** A population assessment was completed for the areas surrounding the recent sighting and high report areas. The area comprises less than 5% of the Big Island, population estimates are between 20- 30 axis deer. A combination of aerial surveys and ground transects were used.

**Educational Video:** A comprehensive 112-minute educational video was created; it focused on axis deer behavior. The purpose was to train individuals on axis deer visual identification and acoustic recognition. The video has been used in training for both partner agencies and the public.

**Deer Tracking Workbook:** A comprehensive axis deer tracking workbook was created that focused on the primary means of identifying axis deer for both certification and dispatch. The workbook also focused on sign transects and recognizing the difference between axis deer and other ungulates present in Hawaii.



*Seen in this photo is a deer team member participating in the removal of the first axis deer from Hawaii Island.*

**Outreach and Training:** We have completed multiple trainings for both partner agencies and the public. The primary goal of the training is to increase the reliability and frequency of deer sighting along with education on adverse effects. The training includes both the use of the video and the workbook.

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### ***Other Activities in FY12***

**Satellite Telemetry Video Collar Test:** A USFWS grant allowed the deer team to test a new satellite telemetry video collar that enables you to track deer remotely and “see what the deer sees”. The test was extremely successful and the implications of this tool for both eradication and certification are significant.

**ACETA Aerial Shoot:** BIISC assisted and participated in the recent south slope aerial shoot on Molokai. This provided a learning opportunity for our staff and in exchange we utilized FLIR technology to significantly increase engagement efficacy during the operations.

**Judas Deer Proposal:** A preliminary proposal to utilize axis deer as Judas animals for the project has been complete. It includes justification, research and results specific to axis deer and cost estimates. An additional test is planned for the near future.

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### ***Additional Information***

**Senate Bill** – BIISC was integral in assisting Senator Gil Kahele and staff in the introduction and passing of Senate Bill SB3001 CD1. This bill addresses a primary factor in any eradication project, stopping the import of additional target species.

“No person shall intentionally, knowingly, or recklessly possess, transfer, transport, or release after transport through interisland movement any live wild or feral deer unless permitted by the department or other department of the State.”

**Partner Collaboration:** The deer team conducted multiple successful partner operations. Participants included staff from DOFAW, NPS, TMA, KWP and BIISC. With an average of 17 people in the field over multiple days we were able to conduct comprehensive ungulate surveys with a high level of confidence. The end result was an average of 1,100 acres surveyed per day during partner operations.



*Dexter Pacheco, NPS Staff, participating in the recent Satellite Telemetry Video Collar Test*